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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,821	03/15/2004	Kerry Dennis Brown	MLF 670-03	1621

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EXAMINER

NILFOROUSH, MOHAMMAD A

ART UNIT	PAPER NUMBER
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3685

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10/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/800,821	Applicant(s) BROWN, KERRY DENNIS	
	Examiner MOHAMMAD NILFOROUSH	Art Unit 3685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-15, 21-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-15, 21-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgements

1. The amendment filed 1 July 2008 is acknowledged.
2. Claims 14-15 and 21-27 are pending.
3. Claims 14-15 and 21-27 have been examined.
4. This Office action is given Paper No. 20081012 for reference purposes only.

Response to Amendments/Arguments

5. Applicant's arguments filed 1 July 2008 have been fully considered but they are not persuasive.
6. It is the Applicant's position that the activation of the magnetic stripe of Cooper is independent of the card actually being placed in a card reader. Examiner respectfully disagrees, as Cooper mentions, in col. 3, ll. **43-47**, that insertion of the card into a device that uses it can cause the pattern to be loaded onto the magnetic strip.
7. Applicant further argues that Cooper does not teach deliberately removing the magnetic data after a predetermined time to make such data unavailable to a card reader. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., removing magnetic data after a predetermined time) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Art Unit: 3685

8. Applicant states that Cooper does not describe anything like “presenting valid data to said magnetic array for a limited time”. However, in col. **6**, ll. **51-57** discloses data corresponding to a magnetic pattern being read from a memory upon entry of the associated designator and being replicated in the magnetic strip. This at least suggests the period of time the data is applied to the magnetic strip is limited as it is not being applied until the associated designator is entered. Further, col. **7**, ll. **25-29** discloses that once the magnetic pattern is generated, the electric current may be turned off and the magnetic field will remain. Thus, the data need only be presented to the magnetic array for the limited time needed to generate the magnetic field, after which it may be turned off.

9. The remainder of Applicant's arguments with respect to claims 14-15 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 14-15 and 21-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. The term "newly recorded" in claims 14 and 15 is a relative term which renders the claim indefinite. The term "newly recorded" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one

Art Unit: 3685

of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The "programmable magnetic data bit positions" are rendered indefinite by the phrase "newly recorded" as it is unclear to one of ordinary skill in the art at the time of the invention what constitutes a "newly recorded programmable magnetic data bit position".

Claims 21-27 are also rejected as each depends from claim 14.

4. Claim 14 recites "...a magnetic stripe on a payment card" in line 6 of the claim. Claim 14 further recites "...said magnetic stripe on a payment card..." in line 8 of the claim. It is thus unclear to one of ordinary skill in the art whether claim 14 intends to recite two separate payment cards, but only a single magnetic stripe, or whether the payment cards are intended to be the same payment card. It is further unclear to one of ordinary skill in the art how a single magnetic stripe can be on two separate payment cards. An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed (*In re Zletz*, 13 USPQ2d 1320 (Fed. Cir. 1989)).

Claims 21-27 are also rejected as each depends from claim 14.

5. Claim 27 recites "timing out release of encrypted card data for...smart card transaction processes." However, claim 14 on which claim 27 depends is directed to a method for operating a payment card having a magnetic stripe. There is no previous mention of a smart card interface in the claim. Therefore, it is unclear to one of ordinary skill in the art at the time of the invention how the card can be used for smart card transaction processes. An essential purpose of patent examination is to fashion claims

Art Unit: 3685

that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed (*In re Zletz*, 13 USPQ2d 1320 (Fed. Cir. 1989)).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 14-15 and 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper (US Patent No. 5,834,747) in view of Wong, et al. (US Patent No. 6,592,044, hereinafter "Wong").

8. Regarding claim 14, Cooper discloses a method for operating a payment card, comprising:

- reading a complete user account data from newly recorded programmable magnetic data bit positions on a magnetic stripe on a payment card (Figure 2, programmable magnetic strip 4 on plastic substrate 3, col. 2 ll. 45-62; col. 3, ll. 6-19; col. 4 ll. 26-29; col. 5, ll. 21-26 Figure 4, magnetic strip 10, electromagnet coils 21, col. 7 ll. 5-38);
- operating a programmable magnetic array in said magnetic stripe on a payment card to write to said programmable magnetic data bit positions when triggered by a card-swipe detector embedded in said magnetic stripe (col. 3, ll. 14-27, 43-47;

col. 4 ll. **26-29**; col. 5, ll. **21-26**; Figure 4, magnetic strip **10**, electromagnet coils **21**, col. 7 ll. **5-38**);

- presenting said complete valid user account data to said programmable magnetic array for a limited time after being triggered by said card-swipe detector (col. 3, ll. **14-27**, **43-47**; col. 4 ll. **26-47**).

Cooper does not specifically disclose reading non-programmable magnetic data bit positions originally recorded on the card along with the programmable magnetic data bit positions, and that only the corresponding portion of the user account data represented by the programmable magnetic bit portions is presented to the magnetic array.

Wong discloses a magnetic stripe that contains both a read-only portion (ROM) as well as a RAM portion that can be altered (Col. 10, l. 53 to Col 11, l. 8). Wong further discloses that the card has a magnetic encoder that can encode the RAM portion of the magnetic stripe (Col. 11, ll. **18-24**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the magnetic stripe on the payment card of Cooper to include a ROM portion that cannot be changed and a RAM portion that can be encoded with a magnetic encoder as disclosed in Wong in order to allow the card to generate an anonymous credit card number (Wong, Col. 9, ll. **51-56**; Col. 11, ll. **18-23**, **47-57**).

9. Regarding claim 21, Wong further discloses allowing said valid user account data to be readable by a magnetic reader or smartcard reader for only a limited number of card transactions (Col. 18, ll. **32-40**).

Art Unit: 3685

10. Regarding claim 25, Wong discloses requiring a user to enter a personal identification number (PIN) on an included keypad before allowing said valid user account data to be accessed by a card reader (Col. 11, ll. 47-63).

11. Regarding claim 27, Cooper discloses timing out a release of card data for legacy magnetic stripe and smart card transaction processes (Col. 3, ll. 14-23, 43-47; Col. 10, ll. 36-37).

Cooper does not specifically disclose that card data is encrypted. However, as this merely describes that type of data that is transferred, it is nonfunctional descriptive material. It has been held that where the printed matter is not functionally related to the substrate, the printed matter will not distinguish the invention from the prior art in terms of patentability [T]he critical question is whether there exists any new and unobvious functional relationship between the printed matter and the substrate (*In re Gulack*, 217 USPQ 401 (Fed. Cir. 1983), *In re Ngai*, 70 USPQ2d (Fed. Cir. 2004), *In re Lowry*, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.01 II).

12. Claims 15 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper in view of Wong, in further view of Kreft, et al. (US Patent No. 6,068,193, hereinafter "Kreft")

13. Regarding claim 15, Cooper discloses a method for operating a payment card, comprising:

- assembling a complete user account data from newly recorded programmable magnetic data bit positions recorded on a magnetic stripe on a payment card

(Figure 2, programmable magnetic strip 4 on plastic substrate 3, col. 2 ll. 45-62; col. 3, ll. 6-19; col. 4 ll. 26-29; col. 5, ll. 21-26 Figure 4, magnetic strip 10, electromagnet coils 21, col. 7 ll. 5-38);

- presenting said complete valid user account data to said programmable magnetic array for a limited time after being triggered by said card-swipe detector (col. 3, ll. 14-27, 43-47; col. 4 ll. 26-47).

Cooper does not specifically disclose reading non-programmable magnetic data bit positions originally recorded on the card along with the programmable magnetic data bit positions, and that only the corresponding portion of the user account data represented by the programmable magnetic bit portions is presented to the magnetic array. Cooper also does not specifically disclose providing a smartcard interface and a programmable magnetic array on a single payment card;

Wong discloses a magnetic stripe that contains both a read-only portion (ROM) as well as a RAM portion that can be altered (Col. 10, l. 53 to Col 11, l. 8). Wong further discloses that the card has a magnetic encoder that can encode the RAM portion of the magnetic stripe (Col. 11, ll. 18-24).

Cooper in view of Wong does not specifically disclose providing a smartcard interface and a programmable magnetic array on a single payment card.

Kreft discloses a payment card with a magnetic stripe and a smartcard contact interface (Figure 1, contacts 6 and magnetic strip 11; Col. 1, ll. 43-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the magnetic stripe on the payment card of Cooper to

Art Unit: 3685

include a ROM portion that cannot be changed and a RAM portion that can be encoded with a magnetic encoder as disclosed in Wong in order to allow the card to generate an anonymous credit card number (Wong, Col. **9**, ll. **51-56**; Col. **11**, ll. **18-23, 47-57**).

Further, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the card of Cooper in view of Wong to include a smartcard contact interface as disclosed in Kreft in order to be able to reload or reprogram the data to be written to the magnetic strip (Kreft, Col. **2**, ll. **61-63**; Col. **3**, ll. **33-41**).

14. Regarding claims 22 and 23, Cooper in view of Wong discloses all the limitations of claim 14 as described above. Cooper in view of Wong does not specifically disclose collocating a smartcard contact interface or a wireless smartcard contactless interface with said programmable magnetic array on a single payment card.

Kreft discloses a payment card with a magnetic stripe and a smartcard contact interface (Figure **1**, contacts **6** and magnetic strip **11**; Col. **1**, ll. **43-55**) along with a contactless interface (Figure **1**, circuit **2** with contactless data transfer portion **3**; Col. **1**, ll. **43-55**; Col. **1**, l. **65** to Col. **2**, l. **4**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the card of Cooper in view of Wong to include a smartcard contact interface as disclosed in Kreft in order to be able to reload or reprogram the data to be written to the magnetic strip (Kreft, Col. **2**, ll. **61-63**; Col. **3**, ll. **33-41**) and to be able to transfer data typically stored on a magnetic stripe wirelessly to relieve the inconvenience of having to determine the correct orientation to slide a magnetic stripe through a card reader (Kreft, Col. **3**, ll. **17-22**).

15. Claims 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper in view of Wong in further view of Teicher, et al. (US Patent No. 6,257,468, hereinafter "Teicher"), and further in view of Kreft.

16. Regarding claims 24 and 26, Wong further discloses that the card has a microprocessor to program the magnetic stripe (Col. **13**, ll. **3-23**).

Cooper in view of Wong does not specifically disclose that the microprocessor is a crypto-processor and that it is shared in support of a smartcard contact interface and said programmable magnetic array. Cooper in view of Wong further does not specifically disclose using data received by said smartcard interface to affect data presented later by said programmable magnetic array to a magnetic card reader.

Teicher discloses a smart card with a cryptographic module in support of an interface that encrypts all communications to a card reader (Figure **10**, electrical contacts [interface] **104**; Figure **11**, encryption/decryption/reader verification module **854**; Col. **13**, ll. **52-56**; Col. **14**, ll. **28-32**; Col. **8**, ll. **36-39**).

Cooper in view of Wong in further view of Teicher does not specifically disclose using data received by said smartcard interface to affect data presented later by said programmable magnetic array to a magnetic card reader.

Kreft discloses that data written through the contacts on the card affects data presented by the magnetic strip (Col. **2**, ll. **61-63**; Col. **3**, ll. **33-36**)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the card of Cooper in view of Wong to include a processor to encrypt communications transmitted via a smartcard interface to a reader as disclosed in Teicher in order to prevent unauthorized interception of personal data. Further, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the card of Cooper in view of Wong in further view of Teicher to allow data to be presented on the magnetic strip to be programmed through the contacts on the card as disclosed in Kreft in order to only allow authorized parties to alter the memory of the card (Kreft, Col. 2, ll. 53-64).

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3685

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD NILFOROUSH whose telephone number is (571)270-5298. The examiner can normally be reached on Monday-Thursday 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Calvin Hewitt can be reached on (571)272-6709. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. N./
Examiner, Art Unit 3685

/Calvin L Hewitt II/
Supervisory Patent Examiner, Art Unit 3685